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Williamson

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(54) **LIGHTING UNIT**

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Related U.S. Application Data

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(51) **Int. Cl.**
A47B 45/00 (2006.01)

(52) **U.S. Cl.** **248/317**; 248/323; 248/342; 248/343; 248/344; 362/85; 362/86; 362/133; 362/154

(58) **Field of Classification Search** 312/223; 362/85, 86, 125, 126, 154, 133; 248/317, 248/323, 342, 343, 344; 52/143
See application file for complete search history.

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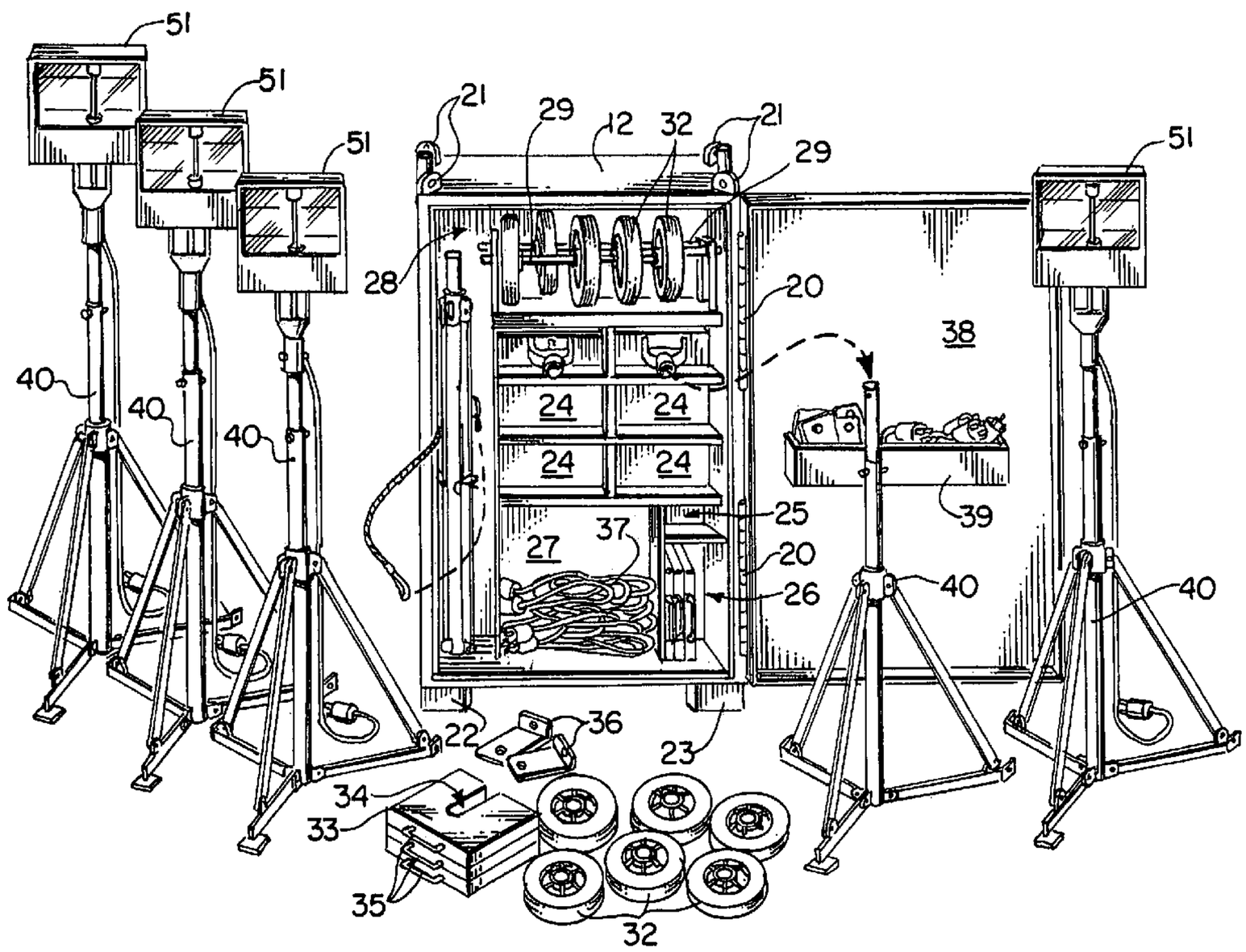
(57) **ABSTRACT**

A lighting and transport system includes a cabinet having an interior with an access panel that can be opened and closed for enabling a user to access the interior when the panel is open. The interior has a plurality of receptacles that include at least one vertically extending tall receptacle that is about as tall as the cabinet. A larger receptacle is provided that is shorter than the vertically extending tall receptacle and a plurality of smaller receptacles are provided that are each smaller in volume than the larger receptacle. At least one tripod is provided that is sized and shaped to be stored inside the cabinet within the tall receptacle. A plurality of electric lighting units are sized and shaped to be contained with the smaller receptacles.

15 Claims, 3 Drawing Sheets



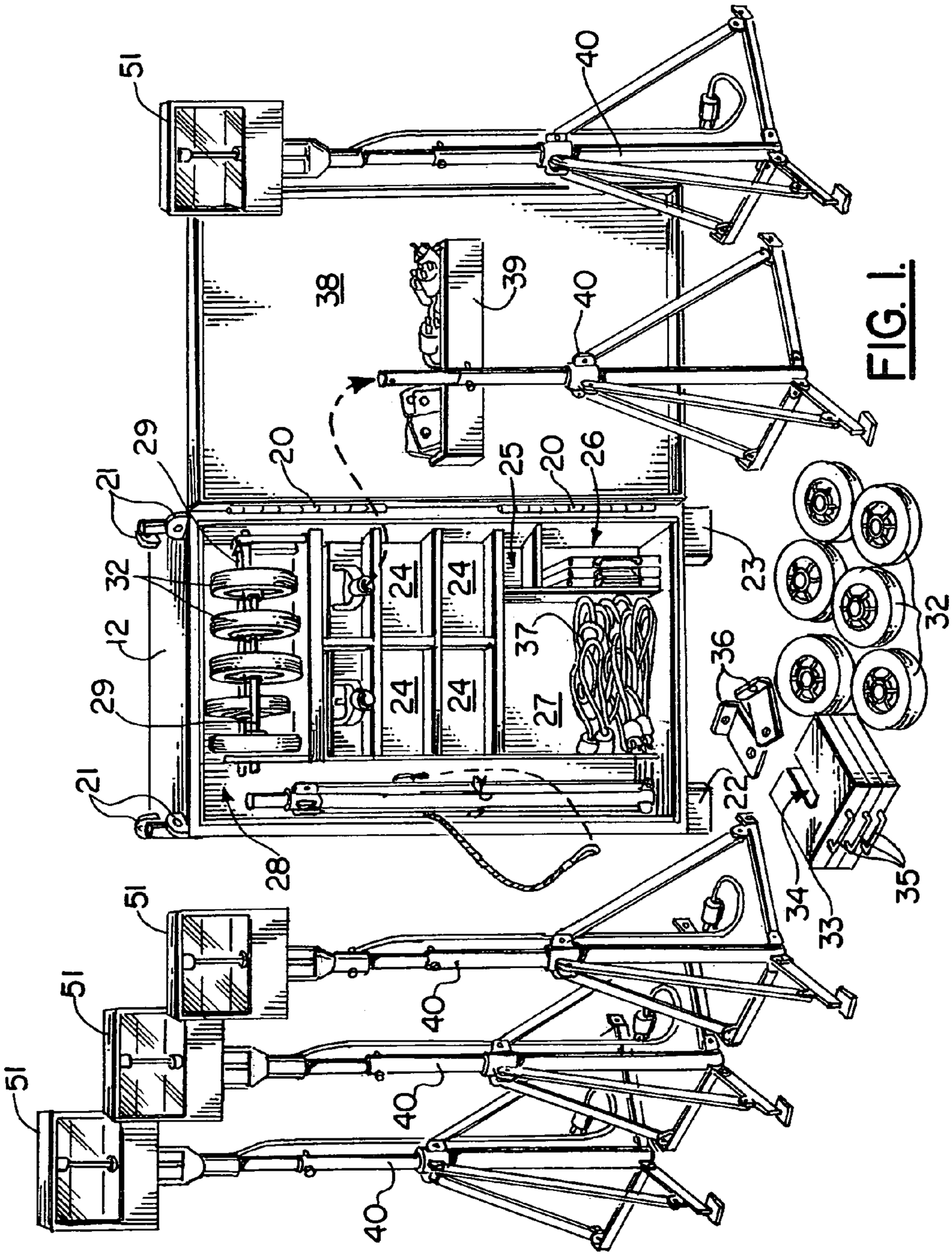


FIG. 1.

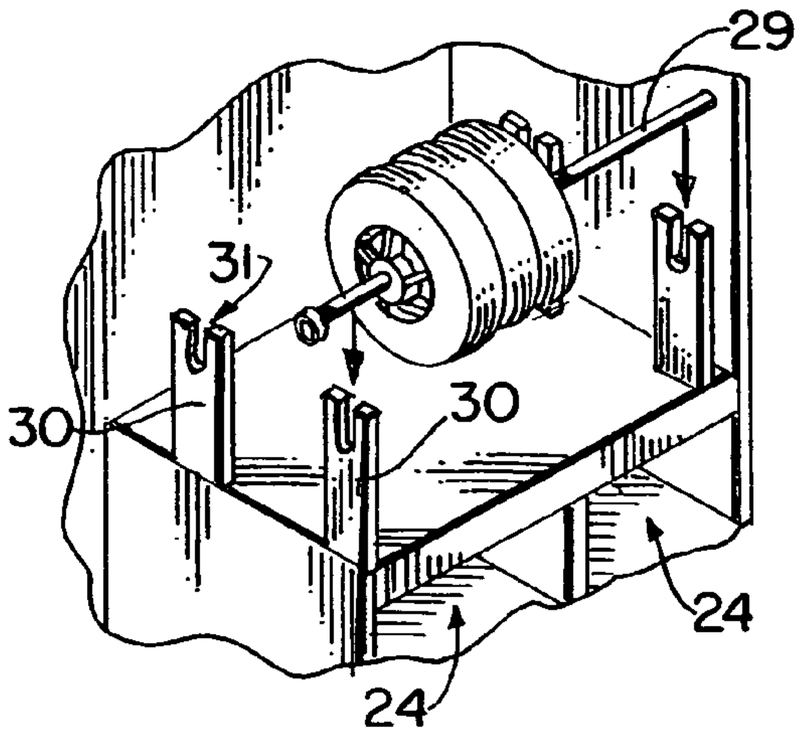


FIG. 2.

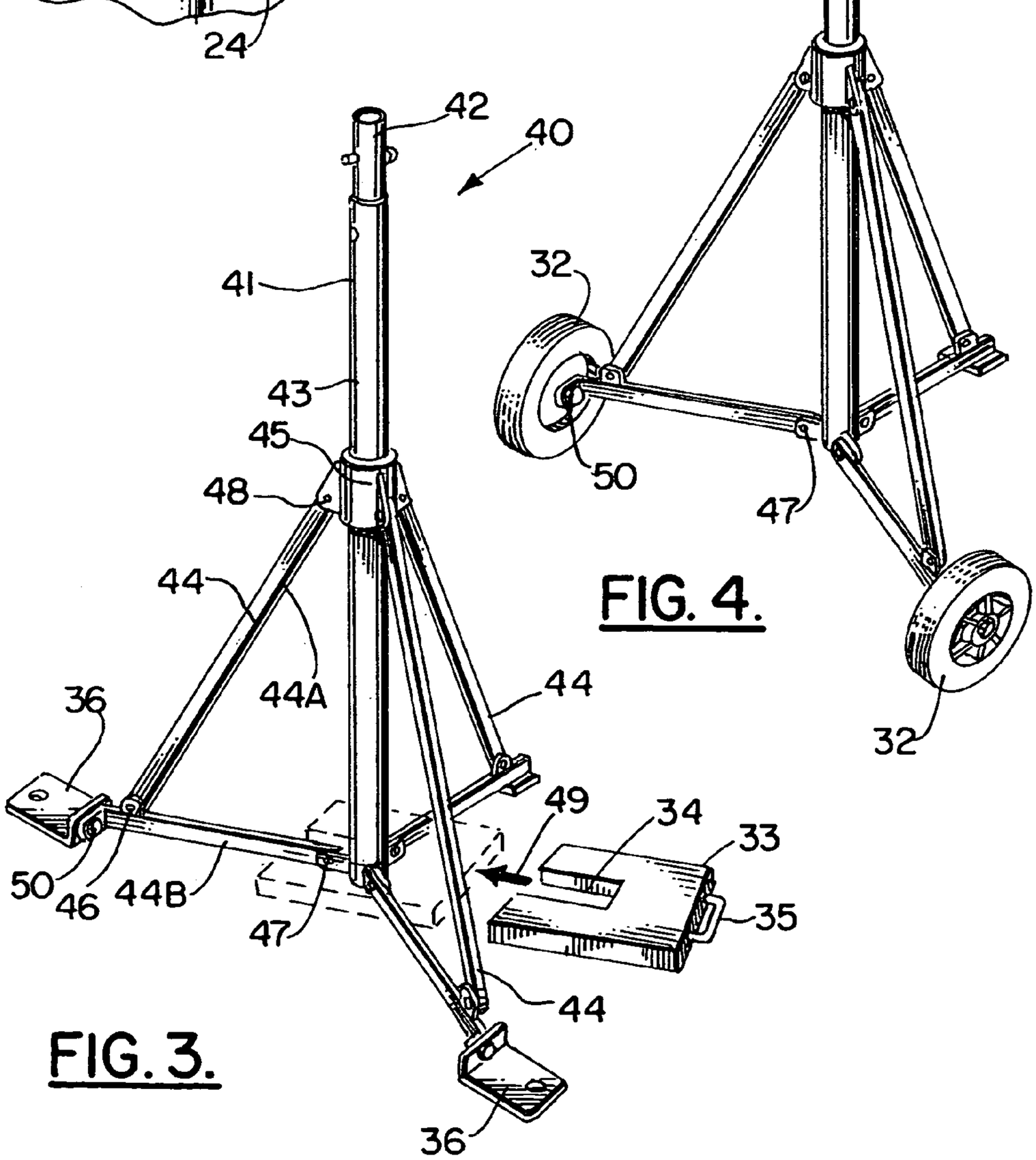


FIG. 3.

FIG. 4.

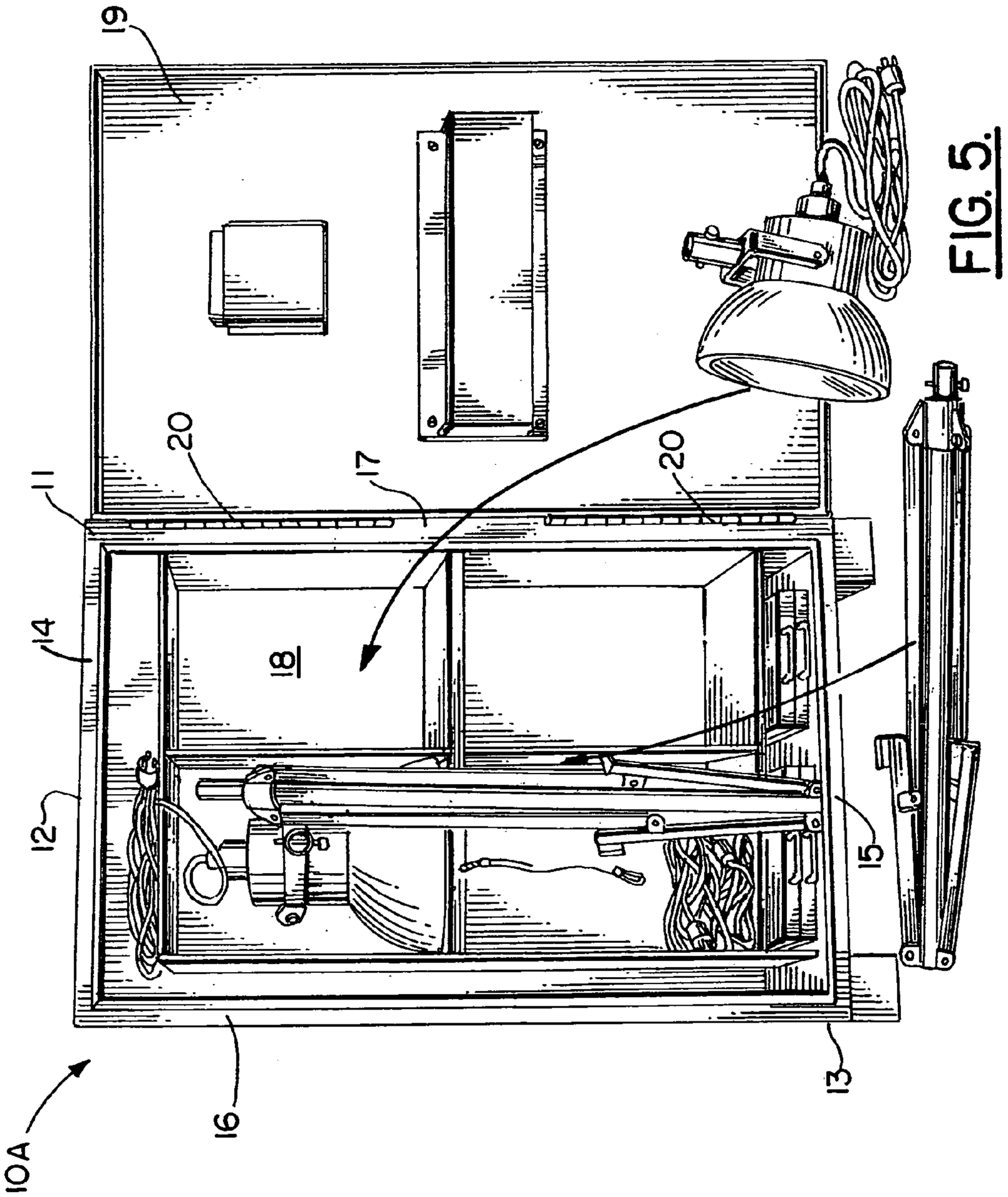


FIG. 5

LIGHTING UNIT

CROSS-REFERENCE TO RELATED APPLICATIONS

Priority of U.S. Provisional Patent Application Ser. No. 60/432,422, filed Dec. 11, 2002, incorporated herein by reference, is hereby claimed.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable

REFERENCE TO A "MICROFICHE APPENDIX"

Not applicable

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to the transportation of lighting equipment. More particularly the present invention relates to an improved lighting transport apparatus that features lighting components that disassemble for storage and transport in a cabinet having vertically and horizontally extending receptacles specially configured to efficiently and conveniently carry the lighting components.

2. General Background of the Invention

Lighting is often required in environments wherein explosions can occur because of natural gas or other volatile substances that might be in the area. In the offshore oil and gas exploration industry, explosion proof lighting is required on any offshore drilling or production platform.

In offshore oil and gas well drilling, platforms that are utilized have chronic space problems. However, the equipment must be taken to the platform that is supplemental equipment to that already located on the platform. Such is often the case with lighting that must be transported, typically by boat, to an offshore oil and gas well drilling platform or production platform. Once supplemental lighting arrives at the platform, the lack of space is compounded by the large lights and/or any containers that they are shipped in.

3. General Discussion of the Present Invention

The present invention solves the problems and shortcomings of the prior art by providing a new, improved lighting and transport system having particular utility in the oil and gas well drilling industry.

The present invention provides a lighting and transport system that includes a cabinet having an interior, an access panel that can be opened and closed for enabling a user to access the interior when the panel is opened, the interior having a plurality of receptacles including at least one vertically extending tall receptacle that is about as tall as the cabinet, a larger receptacle that is shorter than the vertically extending tall cabinet, and a plurality of small receptacles that are each smaller in volume than the larger receptacle.

One or more tripods are sized and shaped to be stored inside the cabinet and within the tall receptacle.

A plurality of electric lighting units are sized and shaped to be contained within the smaller receptacles.

A plurality of accessory components can be removably fitted into the tripods, the accessory components being non-lighting and non-electrical components.

Attachments on the cabinet are provided that enable a selected lifting device to connect to the cabinet at attachments for enabling a lifting device to elevate the cabinet such as from a supply boat to an elevated offshore marine platform.

BRIEF DESCRIPTION OF THE DRAWINGS

For a further understanding of the nature, objects, and advantages of the present invention, reference should be had to the following detailed description, read in conjunction with the following drawings, wherein like reference numerals denote like elements and wherein:

FIG. **1** is a perspective view of the preferred embodiment of the apparatus of the present invention;

FIG. **2** is fragmentary perspective view of the preferred embodiment of the apparatus of the present invention;

FIG. **3** is a partial perspective view of the preferred embodiment of the apparatus of the present invention;

FIG. **4** is a fragmentary perspective view of the preferred embodiment of the apparatus of the present invention showing the tripod portion; and

FIG. **5** is a front, elevation view of the preferred embodiment of the apparatus of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

FIGS. **1–5** show the preferred embodiment of the apparatus of the present invention, designated generally by the numeral **10** in FIGS. **1** and **5**. Lighting and transport apparatus **10** includes cabinet **11** having upper end **11**, lower end **13** and multiple walls **14–18** that encloses various receptacles **25–28** that house parts of lighting devices to be used at a selected location.

Walls **14–18** can include top wall **14**, bottom wall **15**, side walls **16**, **17** and rear wall **18**, access panel **19** can removably attach to cabinet **11** at hinge **20**.

The apparatus **10** is easily transportable and easily liftable. A plurality of lifting eyes **21** are provided next to top wall **14**, preferably being attached hereto using welded connections for example.

In addition to being lifted with a crane for example using lifting eyes **21**, the apparatus **10** of the present invention provides preferably two sockets **22**, **23** that are receptive of forklift tines. This enables the cabinet **11** to thus be lifted either with a crane or other cable supplied lifting device or with a forklift.

The cabinet **11** interior provides a number of receptacles including small receptacles **24–26**, large receptacle **27**, and tall receptacle **28**. The tall receptacle **28** as shown in FIG. **1** can communicate with an upper part of the cabinet **11** that carries rod **29** for holding a plurality of wheels **32**. The rod **29** in combination with supports **30** defines a wheel rack for holding a number of different wheels that can be interchangeably attached to the tripods **40** as shown in FIGS. **1–4**. Slots **31** on each of the supports **30** can be used to cradle an end portion of each rod **29** as shown in FIG. **2**. The wheels **32** and weights **33** define non-electrical, non-lighting components that can be added to the tripods **40** once they are removed from cabinet **11** for use on an offshore oil and gas well platform or like use. Each weight **33** has a slot **34** and a handle **35** for enabling an operator to grasp and move the weight **33**. Tripod **40** provides three legs **44** and feet **36**. The feet **36** can be held to a rig floor or other surface using the weights **33** when they are placed in a position shown in phantom lines in FIG. **3**. Large receptacle **27** of cabinet **11** can hold power cords **37** for powering the explosion proof lamps or other lighting fixture or lighting unit **51** to be

supported by tripods **40**. Access panel **19** has inside surface **38** that can carry a panel receptacle **39** for holding various components to be used with tripods **40** and lighting units **51**.

Each tripod **40** includes a pole **40**, pole sections **42**, **43**, and legs **44**. Collar **45** slides upon pull section **43**. The pull sections **42** and **43** are preferably telescoping with respect to each other and adjustable so that the height of section **42** can be varied with respect to the lower section **41**.

Pinned connections **46**, **47**, **48** can be used for pivotally connecting a leg **44** sections **44**A, **44**B as shown in FIG. **3**. Pinned connections **46**, **47**, **48** are provided for interfacing each of the legs **44** with collar **45**. Arrow **49** in FIG. **3** illustrates the attachment of a weight **33** to tripod **40**. Each of the feet **36** can be attached to legs **44** using flange **50** on leg **44** and a bolted connection for example.

PARTS LIST

The following is a list of suitable parts and materials for the various elements of the preferred embodiment of the present invention.

PART NO.	DESCRIPTION
10	lighting and transport apparatus
11	cabinet
12	upper end
13	lower end
14	top wall
15	bottom wall
16	side wall
17	side wall
18	rear wall
19	access panel
20	hinge
21	lighting eye
22	socket
23	socket
24	small receptacle
25	small receptacle
26	small receptacle
27	large receptacle
28	tall receptacle
29	rod
30	wheel rack support
31	slot
32	wheel
33	weight
34	slot
35	handle
36	foot
37	power cord
38	inside surface
39	panel receptacle
40	tripod
41	pole
42	pole section
43	pole section
44	leg
44A	leg section
44B	leg section
45	collar
46	pinned connection
47	pinned connection
48	pinned connection
49	arrow
50	flange
51	lighting unit

The foregoing embodiments are presented by way of example only; the scope of the present invention is to be limited only by the following claims.

The invention claimed is:

1. A lighting and transport system comprising:

a) a cabinet having an interior, an access panel that can be opened and closed for enabling a user to access the interior when the panel is opened, the interior having a plurality of receptacles including at least one vertically extending tall receptacle that is about as tall as the cabinet, a larger receptacle that is shorter than the vertically extending tall receptacle, and a plurality of smaller receptacles that are each smaller in volume than the larger receptacle;

b) at least one tripod that is sized and shaped to be stored inside the cabinet within the tall receptacle;

c) a plurality of electric lighting units that are sized and shaped to be contained within said smaller receptacles;

d) a plurality of accessory components that can be removably fitted to the tripod, said accessory components being non-electrical and non-lighting components;

e) attachments on the cabinet that enable a selected lifting device to connect to the cabinet at the attachments for enabling a lifting device to elevate the cabinet; and

f) wherein the attachments on the cabinet include one or more forklift tine sockets.

2. The lighting and transport system of claim **1** wherein at least some of the electric lighting units are positioned in receptacles that are one above another.

3. A lighting and transport system comprising:

a) a cabinet having an interior, an access panel that can be opened and closed for enabling a user to access the interior when the panel is opened, the interior having a plurality of receptacles including at least one vertically extending tall receptacle that is about as tall as the cabinet, a larger receptacle that is shorter than the vertically extending tall receptacle, and a plurality of smaller receptacles that are each smaller in volume than the larger receptacle;

b) at least one tripod that is sized and shaped to be stored inside the cabinet within the tall receptacle;

c) a plurality of electric lighting units that are sized and shaped to be contained within said smaller receptacles;

d) a plurality of accessory components that can be removably fitted to the tripod, said accessory components being non-electrical and non-lighting components;

e) attachments on the cabinet that enable a selected lifting device to connect to the cabinet at the attachments for enabling a lifting device to elevate the cabinet; and

f) wherein the lighting units have generally conically shaped shrouds.

4. A lighting and transport system comprising:

a) a cabinet having an interior, an access panel that can be opened and closed for enabling a user to access the interior when the panel is opened, the interior having a plurality of receptacles including at least one vertically extending tall receptacle that is about as tall as the cabinet, a larger receptacle that is shorter than the vertically extending tall receptacle, and a plurality of smaller receptacles that are each smaller in volume than the larger receptacle;

b) at least one tripod that is sized and shaped to be stored inside the cabinet within the tall receptacle;

c) a plurality of electric lighting units that are sized and shaped to be contained within said smaller receptacles;

d) a plurality of accessory components that can be removably fitted to the tripod, said accessory components being non-electrical and non-lighting components;

e) attachments on the cabinet that enable a selected lifting device to connect to the cabinet at the attachments for enabling a lifting device to elevate the cabinet; and

f) wherein the lighting units are explosion proof lighting fixtures.

5. A lighting and transport system comprising:

a) a cabinet having an interior, an access panel that can be opened and closed for enabling a user to access the interior when the panel is opened, the interior having a plurality of receptacles including at least one vertically extending tall receptacle that is about as tall as the cabinet, a larger receptacle that is shorter than the vertically extending tall receptacle, and a plurality of smaller receptacles that are each smaller in volume than the larger receptacle;

b) at least one tripod that is sized and shaped to be stored inside the cabinet within the tall receptacle;

c) a plurality of electric lighting units that are sized and shaped to be contained within said smaller receptacles;

d) a plurality of accessory components that can be removably fitted to the tripod, said accessory components being non-electrical and non-lighting components;

e) attachments on the cabinet that enable a selected lifting device to connect to the cabinet at the attachments for enabling a lifting device to elevate the cabinet; and

f) wherein the lighting fixtures that are rated Class 1, Division 1.

6. A lighting and transport system comprising:

a) a self supporting, transportable cabinet having an interior, an access panel that can be opened and closed for enabling a user to access the interior when the panel is opened, the interior being subdivided into a plurality of receptacles including at least one taller receptacle and a plurality of shorter receptacles that are each shorter than the taller receptacles;

b) a plurality of tripods that are sized and shaped to be stored inside the cabinet in the taller of the receptacles;

c) a plurality of lighting fixtures that are sized and shaped to be contained within a plurality of shorter receptacles, at least some of the fixtures being removably attachable to the tripod;

d) a plurality of accessory components that are connectable to the tripods, said accessory components being non-electrical and non-lighting components; and

e) lifting attachments on the cabinet that enable a selected lifting device to connect to the cabinet at the attachments for enabling the lifting device to elevate the cabinet.

7. The lighting and transport system of claim **6** wherein the accessory components include a plurality of wheels.

8. The lighting and transport system of claim **6** wherein the accessory components include a plurality of weights.

9. The lighting and transport system of claim **6** wherein the accessory components include a plurality of tripod feet.

10. The lighting and transport system of claim **6** wherein the access panel is pivotally mounted to the cabinet.

11. The lighting and transport system of claim **6** wherein the attachments on the cabinet include lifting eyes.

12. The lighting and transport system of claim **6** wherein the attachments on the cabinet include one or more forklift tine sockets.

13. The lighting and transport system of claim **6** wherein the lighting units are positioned in receptacles that are one above another.

14. The lighting and transport system of claim **6** wherein at least some of the lighting units have generally conically shaped shrouds.

15. The lighting and transport system of claim **6** wherein the lighting units are explosion proof lighting fixtures.

* * * * *